

What is claimed is:

1. An apparatus for controlling convergence in a television, comprising:

sensing means provided at a predetermined position on the screen of the television for measuring a quantity of light sensed

5 through scanning of a predetermined video pattern;

pattern generating means for generating a block pattern for scanning surroundings of the sensing means to determine a portion where the sensing means is positioned and the video pattern for convergence control; and

10 convergence control means for controlling the convergence by controlling the scanning of the video pattern based on information on the position of the sensing means, the information being detected using the block pattern generated by the pattern generation means.

2. The apparatus of claim 1, wherein the convergence control means recognizes the position of the sensing means, which is detected using the block pattern, as the center point of the screen and controls the scanning of the video pattern on the basis of the position.

3. A method of controlling convergence in a television, comprising the steps of:

(a) determining a position of a sensor, which is provided at a predetermined location on the screen of the television, through the scanning of a predetermined block pattern; and

(b) controlling the scanning of a predetermined video pattern based on sensor position information which is obtained in the step (a) to control the convergence of the television.

4. The method of claim 3, wherein in the step (b), the position of the sensor which is detected using the block pattern is recognized as the center point of the screen, and the scanning of the video pattern is controlled on the basis of the position.

5. An apparatus for controlling convergence in a television, comprising:

a pattern generator for generating a first predetermined pattern and a second predetermined pattern on a screen;

5 a sensor provided at a location on the screen for sensing a quantity of light caused by the first predetermined pattern and the second predetermined pattern and for outputting a signal corresponding to the quantity of light sensed; and

a convergence controller for receiving the signal output by the sensor, wherein said pattern generator scans the first predetermined pattern in an area around said sensor, and said convergence controller determines location information of the sensor based on the signal

output by the sensor when said pattern generator scans the first predetermined pattern, controls scanning of the second predetermined pattern based on the location information, and controls convergence based on the scanning of the second predetermined pattern.

6. The apparatus of claim 5, wherein the convergence controller uses the location information to recognize the location of the sensor as a center point of the screen and determines an amount of deviation from convergence with respect to the center point of the screen and  
5 outputs a convergence compensation signal based on the amount of deviation.

7. The apparatus of claim 5, wherein the first predetermined pattern is a block pattern and the second predetermined pattern is a line pattern.

8. A method of controlling convergence in a television, comprising steps of:

generating a first predetermined pattern and a second predetermined pattern on a screen;  
15 using a sensor provided at a location on the screen to sense a quantity of light caused by the first predetermined pattern and the second predetermined pattern and outputting a signal corresponding to the quantity of light sensed;

receiving the signal output by the sensor;

- 10 scanning the first predetermined pattern in an area around the sensor;

determining location information of the sensor based on the signal output by the sensor when scanning the first predetermined pattern;

- 15 controlling scanning of the second predetermined pattern based on the location information; and

controlling convergence based on the scanning of the second predetermined pattern.

9. The method of claim 8, wherein the controlling convergence step comprises:

using the location information to recognize the location of the sensor as a center point of the screen;

- 5 determining an amount of deviation from convergence with respect to the center point of the screen;

and outputting a convergence compensation signal based on the amount of deviation.

10 The method of claim 8, wherein the first predetermined pattern is a block pattern and the second predetermined pattern is a line pattern.